

**Green Infrastructure Statement**

**Garden Cottage, Pentre-Poeth Road, Rhiwderin, Newport NP10 8RT**

**Replacement dwelling**

for David Williams Homes Ltd

by Mackley Davies Associates Ltd

October 2024 v1

**1.0 BACKGROUND:**

1.1 The site' refers to a full planning application for demolition of the existing dwelling known as Garden Cottage and a replacement dwelling within the garden curtilage, with all associated level changes, surfacing, boundary treatment and service runs. The existing highway access location will remain unchanged.

1.2 The location is Garden Cottage, Pentre-Poeth Road, Rhiwderin, Newport NP10 8RT at National Grid Reference ST 25122 85908.



Garden Cottage, Rhiwderin – Green Infrastructure Statement v1

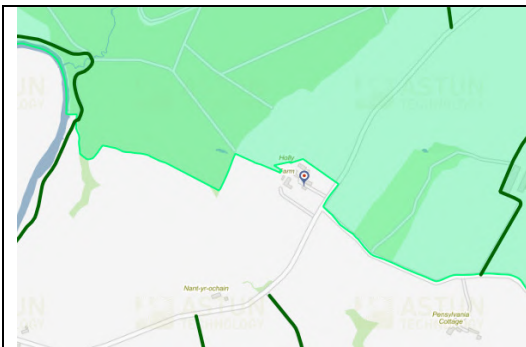
1.3 The site is part of a wider cul-de-sac suburban character residential development based around the former farmyard complex within an open countryside location, with Holly House Farm as the original farmhouse. As photos below illustrate dwelling are set behind often high evergreen hedges.



Garden Cottage, Rhiwderin – Green Infrastructure Statement v1

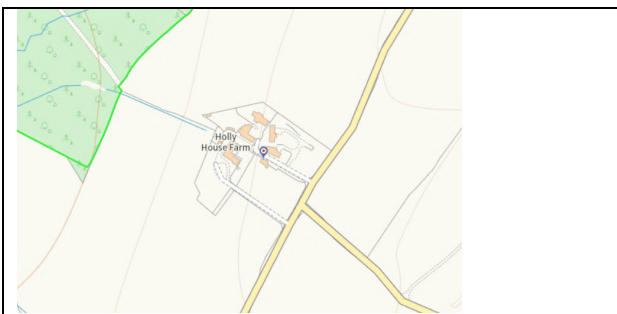


- 1.4 The site lies within the LANDMAP Visual and Sensory ‘Michaelston-y-Fedw’ area described as ‘open rolling lowland’ NWPRTVS002 evaluated as Moderate (across all of scenic quality, integrity, character, rarity) outside the southern edge of the West of Rhiwderin Special Landscape Area.

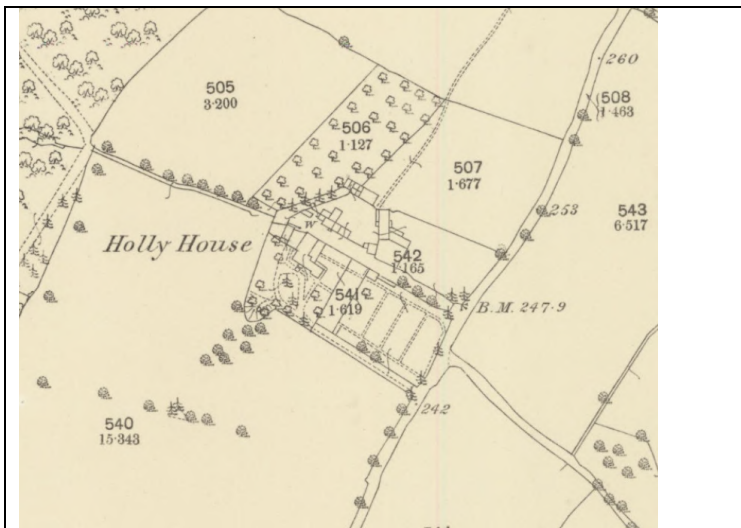


NCC LDP mapping showing public rights of way and the West of Rhiwderin Special Landscape Area

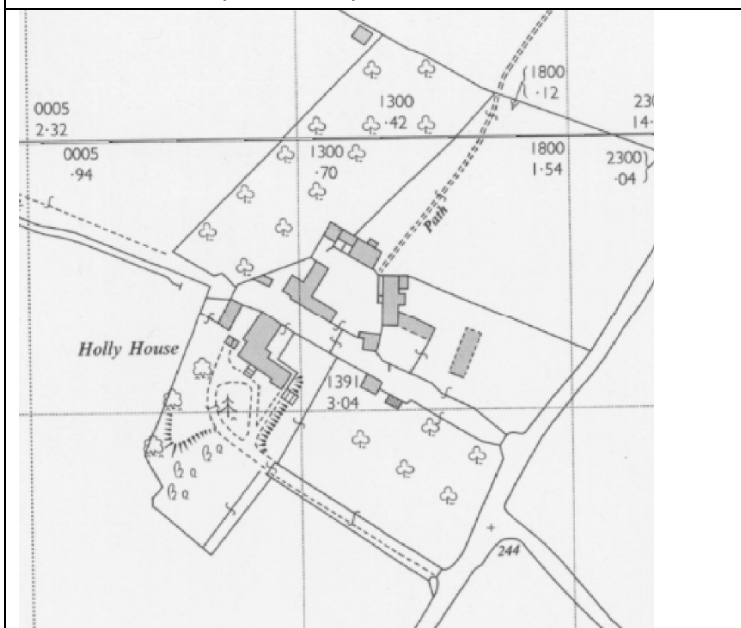
- 1.5 There are no SSSI's in the vicinity. Locally designed SINC sites are shown below and lie away from the site boundaries.



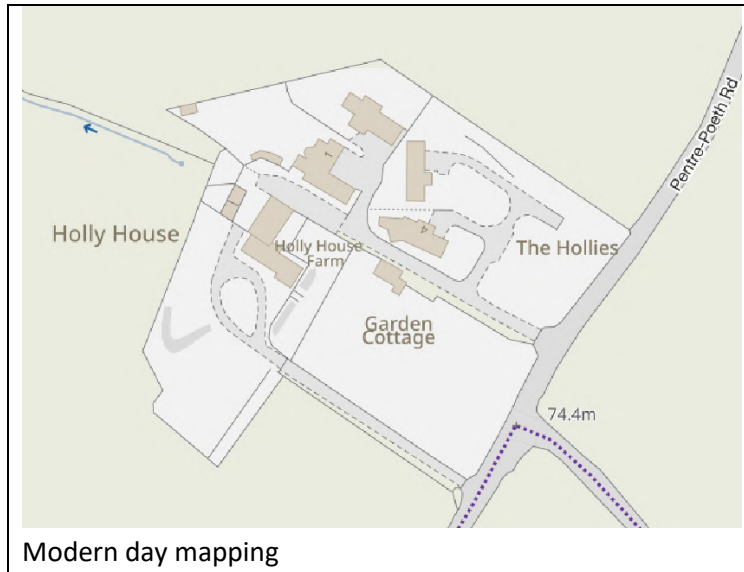
- 1.6 The red line boundary includes the existing Garden Cottage and associated parking and garden area. Neighbouring property overlooks the site and wider ownership boundary to the north-west (Holly House Farm) and north (4 The Hollies). The public facing boundary is defined by a stone wall, generally 1.2m in height and set back with a grass verge. Garden boundaries are defined onto a small open paddock by post and rail fencing, with the boundary onto Holly House Farm defined by estate railing. A short line of trees lie at the ownerships north-east boundary, the wider ownership boundaries to the west and south are fully tree lined.
- 1.7 A topographic survey is available and has been used as the base plan for the tree survey by Mackley Davies and a Soft Landscape Plan by Mackley Davies.
- 1.8 Historic mapping below helps to explain the origin of the current tree lined small paddock and shows orchard trees associated with the Holly House farm complex.



1883 showing the small paddock associated with the site as garden and cut off from adjacent agricultural fields which continues to the present day



1966 showing farm building arrangement prior to development of residential



1.9 The proposals have been carefully considered by the design team to: minimise impact on the key qualities of the site; meet the relevant Local Development Plan policies; integrate the proposal into the landscape; and enhance biodiversity interest. The key points from the tree survey and soft landscape plan are:

- Retention of existing boundary trees requiring no-dig surfacing as specified in the tree survey by Mackley Davies.
- Protection of trees in accordance with the Tree Protection Plan prior to works commencing.
- Stripping of topsoil and storage to BS3882:2015 outside tree root protection areas to enable re-use.
- New native mixed hedge planting onto the paddock.
- Retention of the site boundary stone wall.
- Control of external lighting spill by lighting controls and new orchard planting.
- Undertake planting and seeding in the first planting season following construction and maintain (replacing any failures/failing areas) for five years to ensure successful plant establishment

1.10 The proposals meet the recent changes to Chapter 6 of Planning Policy Wales 12 February 2024 which requires a proactive approach to green infrastructure conservation, restoration and enhancement and the securing of a net benefit for biodiversity through use of the step-wise approach and DECCA framework to provide mitigation and enhancement in addition to a commitment for long-term management of the biodiversity resource.

## 2.0 STEP-WISE APPROACH

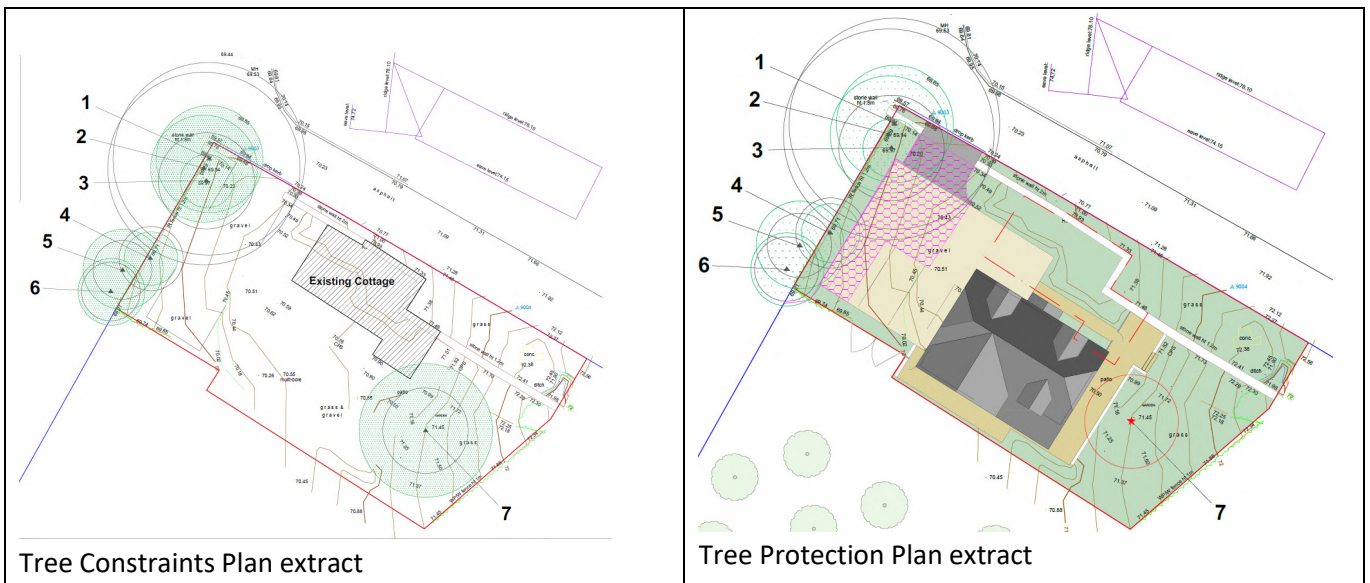
2.1 The step-wise approach has been followed to minimise the impact on habitats and species with green infrastructure constraints identified as the first phase in the design process.

2.2 Existing trees and hedges were surveyed to BS4537 by Mackley Davies to provide design constraints. A no-dig solution will be required for parking surfacing, with removal of T7 self-seeded goat willow category C from the garden to accommodate the proposals.

2.3 The Tree Protection Plan also shown in section 3 will be followed to ensure protection of retained trees during the construction phase.

### 3.0 EXISTING GREEN INFRASTRUCTURE

- 3.1 A summary follows of the Tree Survey and Arboricultural Impact Assessment by Mackley Davies which was undertaken to BS: 5837, the constraints survey was undertaken in August 2024.
- 3.2 The southern boundary contains two mature pollarded limes at the entrance on the northern corner of the site together with a group of self-seeded early mature wych elm, sycamore and goat willow, all are category C.
- 3.3 The proposed works will result in the removal of one category 'C' goat willow (7) within the garden area to accommodate the proposed new retaining wall.
- 3.4 The proposed driveway will impact on the root protection areas of the category 'C' limes (1 & 2) together with the category 'C' early-mature sycamore (3) and wych elm (4) however the impact will be minimised by building with 'no-dig' construction techniques as outlined on the tree protection plan. The impact of the driveway on the existing trees will be further minimised as part of the area already exists as hard surfacing.
- 3.5 The Tree Constraints Plan and Tree Protection Plan are shown below:



- 3.6 Before work commences, protection of trees and hedges to be retained will be undertaken in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction' as detailed in the Tree Survey and at the locations shown on the Tree Protection Plan by Mackley Davies.
- 3.7 Any planting or seeding within tree root protection areas has been separately specified in the soft landscape schedules.

#### **4.0 MITIGATION MEASURES**

- 4.1 Compensatory tree planting is proposed for the loss of T7 (goat willow) at a ratio of 3 to 1 with orchard trees.
- 4.2 Any proposed on-site lighting (internal or external) will confirm to the guidelines in Bat Conservation Trust 2023 Guidance Note 8 ‘Bats and Artificial Lighting’.
- 4.3 Implementation of the Soft Landscape Plan will diversify and extend tree and hedgerow cover which will benefit a range of species by increasing the connectivity of the tree and hedgerow network in the long-term and providing additional foraging and commuting resources in the rural landscape.
- 4.4 Soils in the area are ‘slightly acid loamy and clayey soils with slightly impeded drainage’, found across 2% of Wales. The ‘soil hierarchy’ will be followed to reduce soil handling and soil waste, and for this site there is no requirement to import soil.

#### **5.0 ENHANCEMENT USING THE DECCA FRAMEWORK - to build resilient ecological networks**

- 5.1 The proposals incorporate new native mixed hedge planting as a buffer onto Holly House Farm and onto the open paddock, with paddock planting of orchard trees on semi-vigorous root stock, in addition to new ornamental evergreen hedges and trees.
- 5.2 The Soft Landscape Plan reference: 24/1053/03 is shown in Section 6.0. The soft landscape objectives are to:
- Mitigate for the 1no category C tree loss.
  - Provide an attractive sense of place for existing and new users.
  - Provide a native planted buffer onto the open paddock and Holly House Farm boundaries.
  - Mitigate for impacts and enhance ecological connectivity and diversity.

#### **6.0 PLANTING DETAIL**

- 6.1 Soft Landscape Plan reference: 24/1053/03 follows.
- 6.2 Garden grass areas will be seeded with a species rich mix that can be close mown.
- 6.3 Refer to Soft Landscape Outline Planting and Maintenance Schedule by Mackley Davies for maintenance during the 5 year plant establishment phase.

